

Sheet __1__ of _13_

ORM PTO-1449			Attorney D	ocket No.	04712/02	000F		
	IVIENIVI	PATENT AND TRADEMARK OFFICE						
		J TRADEWIARR OFFICE	Serial No.		09/284,43	6		
			Applicant		Dosuk D.	Lee et al.		
STATEMEN	ON DISCLOSU T BY APPLICA	NT	Filing Date		April 12, 1	999		
(Use several s	sheets if necess	sary)	Group					
o))			IDS Filed		February	4, 2000		
	_	U.S. PATENTS						
Patent Number	Issue Date	Patentee		Class	Subclass	Filing Date (If Appropriate)		
RE 33,161	02/06/90	Brown et al.						
RE 33,221	05/22/90	Brown et al.						
4,157,378	06/05/79	Tomlinson et al.						
4,346,709	11/10/80	Schmitt						
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION								
Document Number	Publication Date	Country or Patent Office		Class	Subclass	Translation (Yes/No)		
WO 92/00109	01/09/92	PCT						
WO 92/02453	07/05/91	PCT				YES		
WO 94/02412	02/03/94	PCT				YES		
OTHER DOCU	MENTS (INCLU	JDING AUTHOR, TITLE, I	DATE, PLACI	OF PUB	LICATION)			
Aoki, "Science an	d medical appli	cations of hydroxyapatite"	, <i>JAAS</i> , 11-1	5, 1991				
				ances in i	mplants for b	one growth		
		eeded with chondrocytes	as a potential	treatment	for vesicour	eteral reflux", J.		
		epts Review: Cellular Biolo	gy of Bone R	esorbing C	Cells", J. Bon	e and Joint		
Barton, et al., "Surface and bulk properties of amorphous calcium phosphate" Colloid Interface Sci. [Proc. Int. Conf.], 50th 3"71 (1976) [CA 87:73954v]								
steriod hormones	', Abstract, Eigl	hth Southern Biomedical E	Engineering C					
EXAMINER KALL DATE CONSIDERED 6.19.03								
	(Use several solution) Patent Number RE 33,161 RE 33,221 4,157,378 4,346,709 FOREI Document Number WO 92/00109 WO 92/02453 WO 94/02412 OTHER DOCUMANIA, "Science and Appel et al., "Onceptomotion", Exp. Conf., 150:745, 19 Athanasou et al., Surg., 78-A:1096-Barton, et al., "Surg., 78-Biomate al., "Surg., 50th 3"71 ((Use several sheets if necess Patent Number Issue Date RE 33,161 02/06/90 RE 33,221 05/22/90 4,157,378 06/05/79 4,346,709 11/10/80 FOREIGN PATENT COMBERITY OF The Pate of the Patent of The Pat	U.S. PATENTS Patent Number Issue Date Patentee RE 33,161 02/06/90 Brown et al. RE 33,221 05/22/90 Brown et al. 4,157,378 06/05/79 Tomlinson et al. 4,346,709 11/10/80 Schmitt FOREIGN PATENT OR PUBLISHED FOREIGN Document Publication Country or Patent Office WO 92/00109 01/09/92 PCT WO 92/00109 01/09/92 PCT WO 94/02412 02/03/94 PCT OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, I Aoki, "Science and medical applications of hydroxyapatite" Appel et al., "Oncologic, Engocrine & Metabolic - Overview promotion", Exp. Opin. Ther. Patents, 4(12):1461-1469, 19 Atala et al., "Injectable alginate seeded with chondrocytes Urol., 150:745, 1993. Athanasou et al., "Current Concepts Review: Cellular Biolo Surg., 78-A:1096-1112, 1996. Barton, et al., "Surface and bulk properties of amorphous of Conf.], 50th 3"71 (1976) [CA 87:73954v] Benghuzzi et al., "Alcap ceramic implantable devices and to steriod hormones", Abstract, Eighth Southern Biomedical Eteriod hormones, Abstract, Eight	(Use several sheets if necessary) Group IDS Filed U.S. PATENTS Patent Number Issue Date Patentee RE 33,161 02/06/90 Brown et al. RE 33,221 05/22/90 Brown et al. 4,157,378 06/05/79 Tomlinson et al. 4,346,709 11/10/80 Schmitt FOREIGN PATENT OR PUBLISHED FOREIGN PATENT AF Document Publication Country or Patent Office WO 92/00109 01/09/92 PCT WO 92/02453 07/05/91 PCT WO 94/02412 02/03/94 PCT OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACIAN, "Science and medical applications of hydroxyapatite", JAAS, 11-13 Appel et al., "Oncologic, Engocrine & Metabolic - Overview - Recent adv promotion", Exp. Opin. Ther. Patents, 4(12):1461-1469, 1994. Atala et al., "Injectable alginate seeded with chondrocytes as a potential Urol., 150:745, 1993. Athanasou et al., "Current Concepts Review: Cellular Biology of Bone R Surg., 78-A:1096-1112, 1996. Barton, et al., "Surface and bulk properties of amorphous calcium phosp Conf.], 50th 3"71 (1976) [CA 87:73954v] Benghuzzi et al., "Alcap ceramic implantable devices and the effect of s steriod hormones", Abstract, Eighth Southern Biomedical Engineering Conf.], 50th 3"71 (1976) [CA 87:73954v] Benghuzzi et al., "Alcap ceramic implantable devices and the effect of s steriod hormones", Abstract, Eighth Southern Biomedical Engineering Conf., 1989; Biomater. Artif. Cells Artif. Organs, 17:464, 1989. DATE CONSIDERED	(Use several sheets if necessary) Group IDS Filed U.S. PATENTS Patent Number Issue Date Patentee Class RE 33,161 02/06/90 Brown et al. RE 33,221 05/22/90 Brown et al. 4,157,378 06/05/79 Tomlinson et al. 4,346,709 11/10/80 Schmitt FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION Document Publication Country or Patent Office WO 92/00109 01/09/92 PCT WO 92/02453 07/05/91 PCT WO 94/02412 02/03/94 PCT OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLISHED FOREIGN PATENT APPLICATION Appel et al., "Oncologic, Engocrine & Metabolic - Overview - Recent advances in in promotion", Exp. Opin. Ther. Patents, 4(12):1461-1469, 1994. Atala et al., "Injectable alginate seeded with chondrocytes as a potential treatment Urol., 150:745, 1993. Athanasou et al., "Current Concepts Review: Cellular Biology of Bone Resorbing C Surg., 78-A:1096-1112, 1996. Barton, et al., "Surface and bulk properties of amorphous calcium phosphate" Colic Conf.], 50th 3"71 (1976) [CA 87:73954v] Benghuzzi et al., "Alcap ceramic implantable devices and the effect of surface are steriod hormones", Abstract, Eighth Southern Biomedical Engineering Conference 16, 1989; Biomater. Artif. Cells Artif. Organs, 17:464, 1989. DATE CONSIDERED 6.19.	(Use several sheets if necessary) Country or Patent Number Sub Patent Number Su		

form with the next communication to applicant.





Sheet __2__ of __13__

	197551								
SUBSTITUTE (MODIFIED)	FORM PTO-1449		MENT OF COM		Attorney D	ocket No.	04712/02	(If Appropriate) (If Appropriate)	
(MODIFIED)		I VIEW VI	J INADEMAKK	OFFICE	Serial No.		09/284,43	36	
	INFORMATI	ON DISCLOSI	IDE		Applicant		Dosuk D.	Lee et al.	
	STATEMEN	ON DISCLOSU IT BY APPLICA	NT		Filing Date		April 12, 1	1999	
	(Use several	sheets if neces	sary)		Group				
(37 CFR §1.98	s(b))				IDS Filed		February	4, 2000	
		-	U.S. PA	TENTS					
Examiner's Initials	Patent Number	Issue Date	F	Patentee		Class	Subclass		
K6	4,347,234	10/09/79	Wahlig et al.				P		
K6	4,429,691	02/07/84	Niwa et al.						
KG	4,612,053	05/09/85	Brown et al.						
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION									
Examiner's Initials	Document Number	Publication Date		country or tent Office		Class	Subclass		
K-6	WO 94/04657	08/12/93	PCT				-	YES	
	WO 95/08319	09/23/94	PCT		·			YES	
	WO 94/20064	09/15/94	PCT						
KG	WO 96/36562	05/20/96	PCT					YES	
	OTHER DOCU	MENTS (INCL	JDING AUTHO	R, TITLE, D	ATE, PLAC	E OF PUB	LICATION)		
ILG	Benghuzzi et al., delivery devices",				nds by resor	bable and	biodegradab	le ceramic drug	
	Benghuzzi, et al., Biomedical Engin 17:465, 1989.								
	Besic et al., "Electeth", J. Dent. R			ncarious en	namel and de	entin and c	alcified tissu	es in mottled	
ko	Blumenthal et al., Calcium Phospha	•				d Transfor	mation of Ar	norphous	
EXAMINER DATE CONSIDERED 6-19. 73									
	nitial citation consid		through citation	n if not in co	onformance a	and not co	nsidered. In	clude copy of this	

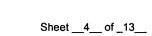


Sheet __3__ of _13__

	Car we							
SUBSTITUTE (MODIFIED)	FORM PTO-1449		MENT OF COI		Attorney D	ocket No.	04712/02	000F
(MODIFIED)		FATENT AND	D TRADEWAR	COFFICE	Serial No.		09/284,43	36
	INICODMATI	ON DISCLOSU	IDE		Applicant		Dosuk D.	Lee et al.
	STATEMEN	IT BY APPLICA	NT		Filing Date		April 12, 1	1999
	(Use several	sheets if neces	sary)		Group			
(37 CFR §1.98	(b))	•			IDS Filed		February	4, 2000
			U.S. PA	TENTS				
Examiner's Initials	Patent Number	Issue Date	-	Patentee		Class	Subclass	Filing Date (If Appropriate)
[C6	4,684,673	08/04/87	Adachi					
146	4,737,411	11/25/86	Graves, Jr., e	t al.			_	
K6	4,842,603	06/27/89	Draenert					
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION								
Examiner's Initials	Document Number	Publication Date		Country or atent Office		Class	Subclass	Translation (Yes/No)
16	WO 97/17285	11/07/96	PCT					YES
K6	EP 0 268 463	05/25/88	Europe					YES
KG	EP 0347028	11/18/89	Europe					YES
	OTHER DOCU	MENTS (INCL	JDING AUTHO	R, TITLE, D	ATE, PLACI	E OF PUBI	LICATION)	
હ	Boskey, Adele, "I	Matrix Proteins	and Mineralizat	ion: An Ove	rview", Conr	nect Tissue	Res., 35 :(1-	-4):357-63, 1996.
	Cannon et al., "C Biomed. Sci. Inst			nidine by hy	/droxyapatite	or tricalciu	ım phosphat	te ceramics",
	Chu et al., "Articu acid (PLA): a tiss						egradable po	orous polylactic
Ko	Chung, et al., "Biological effects of drug-loaded biodegradable membranes for guided bone regeneration" <i>J. Periodont. Res.</i> , 32:172-175. 1997							
EXAMINER LAMA DATE C				DATE CO	NSIDERED	6.14.0	3	
EXAMINER: In	EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this							

form with the next communication to applicant.





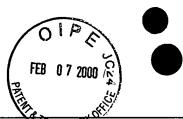
		<u>& </u>	_				
SUBSTITUTE (MODIFIED)	FORM PTOPF449		TMENT OF COMMERCE D TRADEMARK OFFICE	Attorney D	ocket No.	04712/02	000F
(WODII ILD)		77(12,7(17)	5 110 (BEIV) (W.C. O. F. 10E	Serial No.		09/284,43	36
	INFORMATI	ON DISCLOSU	IDE	Applicant		Dosuk D.	Lee et al.
	STATEMEN	IT BY APPLICA	INT	Filing Date April 12, 1999			1999
	(Use several	sheets if neces	sary)	Group			
(37 CFR §1.98	3(b))			IDS Filed		February	4, 2000
			U.S. PATENTS				
Examiner's Initials	Patent Number	Issue Date	Patentee		Class	Subclass	Filing Date (If Appropriate
KG	4,849,193	05/02/88	Palmer et al.		_	_	
Ks	4,880,610	04/20/88	Constantz		_		
	FORE	IGN PATENT C	OR PUBLISHED FOREIGN	PATENT AF	PPLICATION	ON	
Examiner's Initials	Document Number	Publication Date	Country or Patent Office		Class	Subclass	Translation (Yes/No)
KG	EP 0664133	07/26/95	Europe			1	YES
KC.	EP 06228011	08/16/94	Japan			_	abstract only
KG	JP 63170205	07/14/ 88	Japan				YES
	OTHER DOCU	MENTS (INCL	JDING AUTHOR, TITLE, D	DATE, PLACI	E OF PUB	LICATION)	
K6			i-Inflammatory Drug Induce ., San Francisco, CA, 574.			ne Marrow St	tromal Cells" 43 ^r
1	Constantz et al.,	"Skeletal repair	by in situ formation of the	mineral phas	e of bone"	, Sci., 267 :19	976, 1995.
	Dennissen, et al. tissues" J. Period		hysroxyapatite implants for 0-46, 1997.	release of a	gents mod	lulating perio	dontal-like
	Driessens et al., Marcel Dekker, 1		phate bone Cements" Ency	cl. Hndbk. O	f Biomat. A	And Bioeng.,	Wise (EDS) NY
Ko	Ducheyne et al., in Ceramics", Vol		mposites", Chapter 15 fron	n "An Introdu	ction to Bi	oceramics, A	Advanced Series
	10 1 1			NSIDERED	6.19	- 4	

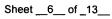




Sheet __5__ of _13__

	Corporation Control							
SUBSTITUTE (MODIFIED)	FORM PTO-1449		TMENT OF COM D TRADEMARK		Attorney D	ocket No.	04712/02	000F
(,					Serial No.		09/284,43	36
	INFORMATI	ON DISCLOSU	IDE		Applicant		Dosuk D.	Lee et al.
	STATEMEN	IT BY APPLICA	NT		Filing Date	!	April 12,	1999
	(Use several	sheets if neces	sary)		Group			
(37 CFR §1.98	s(b))				IDS Filed		February	4, 2000
			U.S. PA	TENTS			- J	
Examiner's Initials	Patent Number	Issue Date	F	Patentee		Class	Subclass	Filing Date (If Appropriate)
K6	4,917,702	02/09/88	Scheicher et a	al.	_	_		
k6	4,938,938	07/03/90	Ewers et al.					
ICG						1		
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION								
Examiner's Initials	Document Publication Country o Number Date Patent Office					Class	Subclass	Translation (Yes/No)
(CG	JP 5-305134	11/19/93	Japan					YES
IC6 JP 2-182261 07/16/90 Japan						_		YES
	OTHER DOCU	MENTS (INCL	JDING AUTHO	R, TITLE, C	ATE, PLAC	E OF PUB	LICATION)	
Ko	Eanes et al., "Inte 1965.	ermediate state:	s in the precipita	ation of hyd	roxyapatite",	Nature, 20	08 :365-36 7 ,	October 23,
	Eanes et al. "Inte Res., 2(1):38 (19			olution prep	aration of al	kaline eart	h phosphate	s" Calcif. Tiss.
	Eanes et al., "The	ermochemical s	tudies on amorp	phous calci	um phospha	te", <i>Calc.</i> 7	īss. Res., 5 :	133, 1970.
	Etex (D. Knaack 1997, Boston, MA		ally Setting Calc	ium Phospl	nate Bone S	ubstitute" (Orthop. Cong	g. August 20-22,
	Etex (Knaack et a 12, Supplement 1	•		cium Phosp	hate Bone S	Substitute"	1997 <i>ASBM</i>	R Abstract, Vol.
	Etex (Knaack et	al) "A Fully Res	orbable Calciur	n Phosphat	e Bone Sub	stitute" <i>Por</i>	tland Bone S	Symp., 1997.
	Fabbri et al., "Hyo architecture", <i>Bio</i>			regates: ph	ysico-chemi	cal nature,	structure, te	xture and
Ko	Glimcher et al., "I Cryst. Growth, 53			: Is the amo	orphous calc	ium phosp	hate theory \	/alid?", <i>J. of</i>
EXAMINER	Katallan			DATE CO	NSIDERED	6.14.	13	
	EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.							

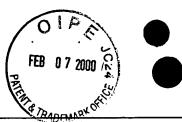




Revised: 27 January 1997

	VA.	1062			_				
SUBSTI (MODIF		FORM PTO-1449		TMENT OF CO		Attorney D	ocket No.	04712/02	000F
(IVIODII	ico,		TAILMIAM	DIVADENIAN	COLLIGE	Serial No.		09/284,43	36
		INFORMATI	ON DISCLOSU	IDE		Applicant		Dosuk D.	Lee et al.
		STATEMEN	T BY APPLICA	NT		Filing Date		April 12, 1	1999
		(Use several)	sheets if neces	sary)		Group			
(37 CFF	R §1.98	(b))				IDS Filed		February	4, 2000
		_		U.S. PA	TENTS				
Examir Initia		Patent Number	Issue Date		Patentee		Class	Subclass	Filing Date (If Appropriate)
IC(G	5,034,059	02/17/89	Constantz					
		5,037,639	05/24/89	Tung					
		5,047,031	05/30/89	Constantz					
		5,053,212	07/27/90	Constantz et al.					
K	·G	5,085,861 03/12/84 Gerhart et al.					_		
		FORE	IGN PATENT (OR PUBLISHED	FOREIGN	PATENT AF	PPLICATIO	N	
Examir Initia		Document Number	Publication Date		Country or atent Office		Class	Subclass	Translation (Yes/No)
J	G	JP 63111875	05/17/88	Japan					abstract only
K	G	JP 7277712	10/24/95	Japan					abstract only
		OTHER DOCU	MENTS (INCL	UDING AUTHO	R, TITLE, D	ATE, PLAC	E OF PUB	LICATION)	
X (Ŝ	Glimcher et al., "f protein-bound ph		•		•		•	ganic matrix by
1		Graves et al., "Re	esorbable ceran	nic implants", J.	Biomed. M	later. Res. S	ymp., No. i	2 (part 1), 9-	115, 1971.
	Greenfield et al., "Formation chemistry of amorphous calcium phosphates prepared from carbonate containing solutions", Calc. Tiss. Res., 9:152, 1972.								
K	٥	Hirasawa et al., " 1988).	Manufacture of	high purity hydi	roxyapatite"	, Chem. Abs	tr., 108(10): 166, No. 7	8193h (March 7,
EXAMIN	NER	attha			DATE CO	NSIDERED	6.19.03		
FXAMIN	NER: In	itial citation conside	ered. Draw line	through citatio	n if not in co	onformance	and not co	nsidered Inc	clude conv of this

form with the next communication to applicant.



Sheet __7__ of __13___

\\/R	ADDIA DA									
.,,	FORM PTO-1449		MENT OF CO		Attorney D	ocket No.	04712/020	posuk D. Lee et al. poril 12, 1999 poclass Filing Date (If Appropriate) poclass Translation (Yes/No)		
(MODII ILD)		TAILINAN	J TIVADENIAN	COTTIOL	Serial No.		09/284,43	36		
	INFORMATI	ON DIECLOSI	IDE		Applicant		Dosuk D.	Lee et al.		
	STATEMEN	ON DISCLOSU IT BY APPLICA	NT		Filing Date	•	April 12, 1	1999		
	(Use several	sheets if neces	sary)		Group		Ì			
(37 CFR §1.98	3(b))				IDS Filed		February	4, 2000		
		· · · · · · · · ·	U.S. PA	TENTS						
Examiner's Initials	Patent Number	Issue Date	1	Patentee		Class	Subclass			
ICG	5,129,905	08/14/89	Constantz							
١	5,149,368	01/10/91	Liu et al.							
	5,152,836	09/12/91	Hirano et al.				_			
,	5,164,187	04/05/90	Constantz et	al.	·					
	5,178,845	07/27/90	Constantz et	al.			ſ			
KG	5,197,985	11/16/90	Caplan et al.							
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION										
Examiner's Initials	Document Number	Publication Date		Country or atent Office		Class	Subclass	F		
	OTHER DOCU	MENTS (INCLI	JDING AUTHO	R, TITLE, C	ATE, PLAC	E OF PUB	LICATION)			
KG	Holmes, et al., "S hydroxyapatite",			n on amorph	nous calcium	n phosphat	e and crystal	line		
	Hubbell, "Biomate	erials in tissue e	engineering", <i>Bi</i>	o/Tech., 13 :	:56, 1995.					
	ljntema et al., "Hy 112:215, 1994	/droxyapatite m	icrocarriers for	biocontrolle	d release of	protein dru	ıgs", <i>Int'l J. o</i>	of Pharm.,		
	lkada et al., "Rele Rel., 2:179-186,		c from composi	tes of hydro	oxyapatite ar	nd poly(lact	ic acid)", J. o	of Controlled		
	Itokazu et al., "Dr	ug delivery sys	tems using por	ous hydroxy	apatite block	ks", J. Orth	o. Surg., 2(2):47-50, 1994.		
K6	Ishikawa et al., "Effects of preparation in aqueous solution on properties of hydroxyapatites" Dent. Mater. J., 9(1):58 (1990) [CA 113:218168j]									
EXAMINER	DATE CONSIDERED 6.17.13									
	EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.									





Sheet __8__ of _13__

70	<u> </u>									
SUBSTITUTE (MODIFIED)	FORM PTO-1449		MENT OF COM		Attorney D	ocket No.	04712/020	04712/02000F 09/284,436 Dosuk D. Lee et al. April 12, 1999 February 4, 2000 Subclass Filing Date (If Appropriate)		
(MODII 1ED)		FAILINI AIN	TIADLIMAIN	OFFICE	Serial No.		09/284,43	6		
	INICODAAATI	ON DISCLOSU	IDE.		Applicant		Dosuk D.	Lee et al.		
	STATEMEN	ON DISCLOSU T BY APPLICA	NT		Filing Date		April 12, 1	999		
	(Ose several s	sheets if necess	sary)		Group					
(37 CFR §1.98	(b))				IDS Filed		February	4, 2000		
			U.S. PA	TENTS						
Examiner's Initials	Patent Number	Issue Date	F	Patentee		Class	Subclass			
166	5,226,914	11/16/90	Caplan et al.							
	5,262,166	11/16/93	Liu et al.							
l	5,279,831	04/05/90	Constantz et a	al.						
Ico	5,281,265	01/25/94	Liu							
	FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION									
Examiner's Initials	Document Number	Publication Date	Country or Patent Office			Class	Subclass	Translation (Yes/No)		
	OTHER DOCU	MENTS (INCLU	JDING AUTHOR	R, TITLE, D	ATE, PLACI	E OF PUBI	LICATION)			
KG	Jang, B.Z., "Adva	nced Polymer (Composites", Ch	n. 1, Intro.,	The Mater. I	nfo. Soc.				
	Kim et al., "Effect Rats" 43 [™] Annual									
	Labarthe et al., "S Chem., 8 :289, 19		et les propriétés	des apatite	es carbonaté	es de type	B phospho-	calciques", <i>Ann</i> .		
	Mileti, et al., "Dev Biomed. Sci. Insti			ceramic ma	trix for the co	ontinuous o	lelivery of co	oumadin",		
1	Moldovan et al., " Toronto, Canada,		ivery of analges	ics by cera	mics", Albstr	act, Fifth V	Vorld Biomat	erials Congress,		
KG	Moldavan et al., ". 180, 1994.	A ceramic syste	em for continuo	us release o	of acetylsalic	ylic acid", i	Biomed. Sci.	Instrm. 30:175-		
EXAMINER	DATE CONSIDERED 6.19.00									
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.										





Sheet __9__ of _13__

Revised: 27 January 1997

								1	
SUBSTIT (MODIFIE		FORM PTO-1449		TMENT OF COM D TRADEMARK		Attorney D	ocket No.	04712/02	000F
						Serial No.		09/284,43	6
		INFORMATI	ON DISCLOSU	IRF		Applicant		Dosuk D.	Lee et al.
		STATEMEN	T BY APPLICA	NT		Filing Date	ı	April 12, 1	999
		(Use several s	sheets if neces	sary)		Group			
(37 CFR	§1.98((b))				IDS Filed		February	4, 2000
				U.S. PA	TENTS				
Examine Initials		Patent Number	Issue Date	F	Patentee		Class	Subclass	Filing Date (If Appropriate)
KG	,	5,286,763	06/05/89	Gerhart et al.					
1		5,342,441	08/30/94	Mandai et al.					
		5,336,264	07/23/92	Constantz et a	al.				
Ko	5	5,352,715 02/28/92 Wallace et al.							-,·-
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION									
Examine Initials					Country or Itent Office		Class	Subclass	Translation (Yes/No)
		OTHER DOCU	MENTS (INCL	JDING AUTHO	R, TITLE, C	ATE, PLAC	E OF PUB	LICATION)	
KG	,	Nolan, et al., "Cla	cium hydroxya	patite ceramic d	elivery syst	tem", <i>J. Bone</i>	e and Joint	Surg., 75-13	3:334, 1993.
		Norian, et al., "Th	e Material Scie	nce of Norian S	RS, Skeleta	al Repair Sys	stem."		
		Nylen, et al., "Mo 9:95, 1972.	lecular and ultra	astructural studi	es of non-c	rystalline cal	lcium phos	phates", Cal	c. Tiss. Res.,
		Onodera et al., "le Ostoeblasts" 43" 1997.							
		Otsuka et al., Effe setting bioactive							of a novel self-
		Otsuka et al., "A of the mixing solu <i>Sci.</i> , 84 (6), June	ition volume on						
اده	Otsuka et al., "A novel skeletal drug-delivery system using self-setting calcium phosphate cement. 4. Effects of the mixing solution volume on the drug-release rate of heterogeneous aspirin-loaded cement", <i>J. of Pharm. Sci.</i> , 83(2), February 1994.								
EXAMINE	ER	KituM C			DATE CO	NSIDERED	6./1.0	13	
EXAMINE	EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this								



Sheet __10_ of _13__

	FORMMANO-1449		MENT OF COMMERCE		Oocket No.	04712/02	(If Appropriate) (If Appropriate) (It Appropri	
(MODIFIED)		PATENT AND	O TRADEMARK OFFICE	Serial No.		09/284,43	36	
				Applicant		Dosuk D.	Lee et al.	
	STATEMEN	ON DISCLOSU T BY APPLICA	NT	Filing Date	е	April 12,	1999	
	(Use several s	sheets if neces	sary)	Group			`	
(37 CFR §1.98	(b))			IDS Filed		February	4, 2000	
			U.S. PATENTS					
Examiner's Initials	Patent Number	Issue Date	Patentee		Class	Subclass		
K6	5,399,665	11/05/92	Barrera et al.					
ICG	5,470,803	11/28/95	Bonfield et al.			_		
Ico	5,486,359	02/08/94	Caplan et al.					
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION								
Examiner's Initials	Document Number	Publication Date	Country or Class Patent Office		Class	Subclass		
OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)								
KG	Pool, "Coral chen	nistry leads to h	uman bone repair", Sci.,	269 :1772 (Ma	arch, 1995)			
	Posner et al., "Sy Struc., 8:273-281		ous calcium phosphate a	ind its relation	to bone m	ineral structu	re", <i>Bone Min.</i>	
	Rey, et al., "Struc	tural studies of	the mineral phase of cal	cifying cartila	ge", J. Bone	Min. Res., 6	6:515, 1991	
	Rey et al., "Chem only	ical Properties	of Poorly Crystalline Apa	tites" <i>Phosph</i>	orus Res. I	Bull. 6:67-70	(1996) abstract	
			onment in bone mineral: a. <i>Int.</i> , 45 :157, 1989.	a resolution-ei	nhanced for	urier transfor	m infrared	
	Rey et al., "Prepa Symposium Absti		oorous Ceramic at Low T	emperature fr	om Poorly	Crystalline A	patite"	
	Roodman, D.G.,	Advances in B	one Biology: The Osteoc	last", Endo. R	ev., 17(4):3	308-332, 199	6.	
	Shinto, et al., "Cla Surg., 74B(4):600		•	delivery syst	em for antib	piotics", J. of	Bone and Joint	
K6	Shors et al., "pord Pte. Ltd., 1993	ous hydroxyapa	tite" in An Introduction to	Bioceramics	(Hersch et	al., eds), Wo	ork Sci. Publ. Co.	
EXAMINER	KIMO	•	DATE (CONSIDERED	6.19.6	9		
	nitial citation consider		through citation if not in	conformance	and not co	nsidered. In	clude copy of this	



Sheet _11__ of _13__

Revised: 27 January 1997

	an a trad amplitude							
	FORM PTO-1449		MENT OF COM		Attorney D	ocket No.	04712/02	000F
(MODIFIED)		PATENTANI	DIRADEMARK	OFFICE	Serial No.		09/284,43	36
					Applicant		Dosuk D.	Lee et al.
		ON DISCLOSU IT BY APPLICA			Filing Date		April 12, 1	1999
	(Use several s	sheets if neces	sary)		Group			
(37 CFR §1.98	(b))				IDS Filed		February	4, 2000
-			U.S. PAT	TENTS			1.	
Examiner's Initials	Patent Number	Issue Date	Р	atentee		Class	Subclass	Filing Date (If Appropriate)
K6	5,496,399	08/23/94	Ison et al.					
1	5,514,378	02/01/93	Mikos et al.					
	5,516,532	05/14/96	Atala et al.				_	
Ko	5,522,893	06/04/96	Chow et al.					
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION								
Examiner's Initials	Document Number	Publication Country or Date Patent Office				Class	Subclass	Translation (Yes/No)
	OTHER DOCU	MENTS (INCL	JDING AUTHOR	R, TITLE, D	ATE, PLACI	E OF PUB	LICATION)	
KG	Suzuki, et al., "Ide Osteoblast", 43 rd	entification Mac	crophage Migration op. Res. Soc., F	on Ingibitor ebruary 9-	y Factor in N 13, 1997, Sa	Murine Nec In Francisc	onatal Clavar co, CA.	iae and
1	Termine, et al., "A	Amorphous/Cry	stalline Interrelat	tionships in	Bone Miner	al", Calc. 1	riss. Res. 1,	8-23, 1967.
	Thoma, et al., "Bi Pharm. Biopharm			implants b	ased on β-tri	calcium ph	nosphate cer	amic", <i>Eur. J</i> .
	Thoma, et al., "Bi 1991.	odegradable G	entamicin-Depot	implantate	aus β-tricalc	ium-phosp	hatkeramik",	, Pharmazie, 46,
	Thomson et al, "F Polymer Edn., 7:2		ogradable polym	ner scaffold	ls to enginee	r trabecula	ar bone", <i>J. E</i>	Biomat. Sci.
	Tona, et al., "Derivatized hyaluronic acid films support mesenchymal stem cell attachment and proliferation", Fifth World Biomat. Cong., May 29-June 2, 1996, Toronto, Canada							
KG	Tormala, "Biodeg properties", Clin.			ite material	s; manufactu	uring struc	ture and med	chanical
EXAMINER (EXAMINER LAM. Considered 6:19.03							
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.								



Sheet _12___ of __13___

	& TRAP							
SUBSTITUTE (MODIFIED)	FORM PTO-1449		MENT OF COMM		Attorney D	ocket No.	04712/02	000F
(MODII IED)		I ATENT AN	DITABLMANIO	,,,,,	Serial No.		09/284,43	36
	INICODAATI	ON DICCLOSI	IDE.		Applicant		Dosuk D.	Lee et al.
	STATEMEN	ON DISCLOSU IT BY APPLICA	NT		Filing Date	ı	April 12, 1	1999
	(Use several	sheets if neces	sary)		Group			
(37 CFR §1.98	3(b))				IDS Filed		February	4, 2000
			U.S. PATE	NTS				
Examiner's Initials	Patent Number	Issue Date	Pate	tentee		Class	Subclass	Filing Date (If Appropriate)
16	5,525,148	09/24/93	Chow et al.					
	5,542,973	08/06/96	Chow et al.					
1	5,545,254	08/13/96	Chow et al.					
166	5,565,502	10/15/96	Glimcher et al.					
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION								
Examiner's Initials	Document Number	Publication Date				Class	Subclass	Translation (Yes/No)
	OTHER DOCU	MENTS (INCL	JDING AUTHOR, 1	TITLE, D	ATE, PLAC	E OF PUB	LICATION)	
KG	Tung, et al., "An i 1983.	ntermediate sta	ate in hydrolysis of	amorpho	ous calcium	phosphate'	', Calcif. Tiss	sue Int., 35:783,
١	Tung et al., " In vi and Immob. Biote		e of antibiotic-loade 1-88, 1995.	ed porou	s hydroxyap	atite ceme	nt", <i>Art. Cell,</i>	Blood Subs.,
	Uchida et al., "Slo 10:440-445, 1992		nticancer drugs from	m porous	s calcium hy	droxyapati	te ceramic",	J. of Ortho. Res.,
	Van Valkenburg, 1996).	J., <i>"Biological b</i>	oone graft substitute	te helps t	oody heal its	elf", Comm	ercial Appea	al, B4 (22 August
Ko	Yasue, et al., "Effect of Adsorption of Succinic Acid on the Formation of Amorphous Calcium Phosphate," Journal of the Ceramic Society of Japan (Japanese Version), Vol. 102, No. 12, pp. 1122-1127, 1994.*/1							
EXAMINER	KatMa	•	D	ATE CO	NSIDERED	6.19.0	3	
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.								



Sheet __13___ of __13___

\0	, c.						
SUBSTITUTE FÖRM PTO-1449 U.S. DEPARTMENT OF COMMERCE (MODIFIED) PATENT AND TRADEMARK OFFICE				Attorney Docket No.		04712/02000F	
(MODIFIED) FATERI AND INADEMARK OF THE				Serial No.		09/284,436	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				Applicant		Dosuk D. Lee et al.	
				Filing Date		April 12, 1999	
				Group			
(37 CFR §1.98(b))				IDS Filed		February 4, 2000	
U.S. PATENTS							
Examiner's Initials	Patent Number	Issue Date	Patentee		Class	Subclass	Filing Date (If Appropriate)
KG	5,605,713	02/25/97	Boltong				
1	5,665,120	09/09/97	Ohtsuka et al.				
	5,691,397	11/25/97	Glimcher et al.				
IC6	5,700,289	12/23/97	Breitbart et al.				
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION							
Examiner's Document Publication Initials Number Date		Country or Patent Office		Class	Subclass	Translation (Yes/No)	
<u></u>							
OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)							
EXAMINER KJM 6-			DATE CO	CONSIDERED 6.19. 03			
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.							